DAILY FIELD ACTIVITY REPORT

PROJECT NAME: Pre-Remedial Design Investigation and Baseline Sampling, Portland Harbor Superfund Site

DATE: April 20, 2018	**WEATHER:** Partly cloudy, calm, high ~65 degrees F

Personnel and Visitors Onsite:
Research vessel Cayuse – CDM Smith: Julee Trump; AECOM: Michaela McCoog; Geosyntec: Luke Smith; Gravity Marine: John Schaefer, Peter Jenkins

Research vessel Tieton – (no oversight representative) AECOM: Nicky Moody; Geosyntec: Alison Clements, Keith Kroger; Gravity Marine: Mike Duffield, Maggie Mckeon

Planned Activity:

- Collect surface sediment samples at stratified random sample locations continuing upriver from river mile (RM) 7.3.

Activity Completed:
A tailgate safety meeting was led by AECOM. Topics included near misses/good catches, review daily activities and associated hazards and protective measures in reference to the JHA, slips trips and falls, hand safety and communication with operators, and boat orientation for new field member when moving the grab sampler. CDM Smith reminded the crews to watch for sheen on the river for cleanup, and coordinated safe observation when pulling and dropping samples, and to maintain the exclusion zone down wind of support zone during sampling operations.

Morning and evening position checks on both vessels at PH-2 (Fred Devine Diving and Salvage piling).

- Evening position check on the Cayuse read 700967.83, 7634505.91 (State Plane Coordinate system, Oregon – North, NAD83, International feet), which is approximately 0.5 meter off of the survey coordinates of PH-2, meeting the FSP specification of 1 to 2 meter horizontal accuracy.

Boats met up multiple times to discuss EPA direction conveyed to the crews by Julee Trump to collect additional 'thin' sample in areas experiencing grabs with low recovery due to dense sand/silt layers, which would be held for later analysis.

Julee Trump performed oversight of surface sediment sampling at random stratified locations on the East side of on the Willamette River from 08:00 to 18:30 on board the Cayuse. Specific activities completed by the AECOM/Geosyntec team, with vessel support from Gravity Marine, are as follows:

- 3-point composite surface sediment samples were collected from 7 random stratified sampling locations between RM 7.4 and 7.7 East and middle as summarized below. Activities included decontamination of sampling equipment using Alconox and deionized/distilled water and housekeeping of the sampling area.
- Sample location SG-B234 was investigated and determined to be too close to the Kinder Morgan pipeline to comfortably sample based on visual observations of the signage on opposing shorelines in reference to the boat position at the sample location. AECOM indicated that they plan to use an alternate location, but have skipped this location for now.
- Duplicate sample was collected

Julee Trump received updates from the Geosyntec crew of the Tieton at 18:30. The following work was completed:

- 3-point composite surface sediment samples were collected from 4 random stratified sampling locations between approximately RM 7.3 and 7.7 West as summarized below. Activities included decontamination of sampling equipment using Alconox and deionized/distilled water and housekeeping of the sampling area.

Status of Schedule & Priority Work:

- Random stratified sampling will continue through the weekend and into next week, progressing up the river. Work is anticipated to be suspended on Wednesday for a day off. Crews continue to rotate.
- Locations on private property are being skipped until access agreements are obtained.
- Sample locations in areas of known/encountered heavy sheen contamination are planned to be skipped and returned to with support from NRC Environmental Services to contain sheen during sampling.
- Sampling is taking more time than initially projected.

Issues/Concerns/Resolutions (include work performed that was not planned or anticipated):
Due to H&S concerns related to the winch system and limited space on the work deck of the Cayuse, Gravity will not allow EPA oversight staff on the work deck while the winch is operating. This limits oversight staff ability to observe for sheen generation while the power grab is pulled up or lowered into water. Therefore, oversight staff have advised the Gravity winch operator to observe for sheen during these operations and promptly land the power grab on the deck so observations can be made and corrective actions take to address the sheen in the water, observe and photograph the clean up activities. This is not an issue on the Tieton,which has more work space and clearance of the winch cable.

A few of the random stratified sample locations may be in conflict with the Kinder Morgan pipeline per observed signage on site. Gravity has recommended that an alternate location be used (see figure below).

Sampling crews have direction to implement the proposed sampling procedure submitted to the EPA by AECOM on 4/20/2018, which is inconsistent with EPA requested procedures. However, all samples taken today were at or over 20 cm in the 25 FT radius, so the AECOM plan was not implemented.

Samples Collected, Measurements Made, Photographs: (List Locations, Matrix & Sample type):
On the Tieton, stratified random surface sediment samples were collected at following locations between RM 7.3 and 7.7 on the West side of the channel:

- PDI-SG-B237-BL1
- PDI-SG-B236-BL1
- PDI-SG-B232-BL1
- PDI-SG-B230-BL1
- All samples recorded to be taken within the 25 FT radius with grab recoveries at or greater than 20 cm.

On the Cayuse, stratified random surface sediment samples were collected at following locations between RM 7.4 and 7.7 on the East side of the channel. (see figures below for location information)

- PDI-SG-B226-BL1 – Within 25 FT radius: sandy silt
- PDI-SG-B229-BL1 – Within 25 FT radius: sandy silt, woody debris, plastic drinking straw
- PDI-SG-B231-BL1 – Within 25 FT radius: sandy silt over silty sand, some organic debris
- PDI-SG-B233-BL1 – Within 25 FT radius: sandy silt over silty sand, vermiculite-like particles throughout sand, issues with washout on discarded grabs due to large woody debris
- PDI-SG-B238-BL1 – Within 25 FT radius: sandy silt, small spot of sheen (<1cm), clams, trace organics
- PDI-SG-B240-BL1 – Within 25 FT radius: sandy silt and silty sand layers, trace cobbles
- PDI-SG-B243-BL1 – Within 25 FT radius: sandy silt, trace organics, woody debris, piece of metal pipe (~3-4” diameter, clam
- Sediment descriptions are simplified descriptions. AECOM/Geosyntec collected detailed descriptions.

Photographs of work were taken throughout the day on board the Tieton and provided to EPA via email. Additional photos were taken and archived with a description included in the photolog Excel spreadsheet, which are maintained electronically in the ProjectWise project folder.

Borings Completed (Include total footage drilled for each boring):
None

Wastes Generated and How Handled:

- Heavy petroleum sheen was not observed on the Tieton or Cayuse. Excess sediment and debris in the power grab sampler and in the sampling bowls was rinsed back into the river per the FSP.
- Disposable gloves, paper towels, and other general trash was containerized in a trash bag and removed as needed for disposal to a municipal waste management dumpster.

Health and Safety Issues, Equipment Needs, Staffing:
See discussion of work area restriction while winching.

Signature: Julee Trump **DATE** April 21, 2018

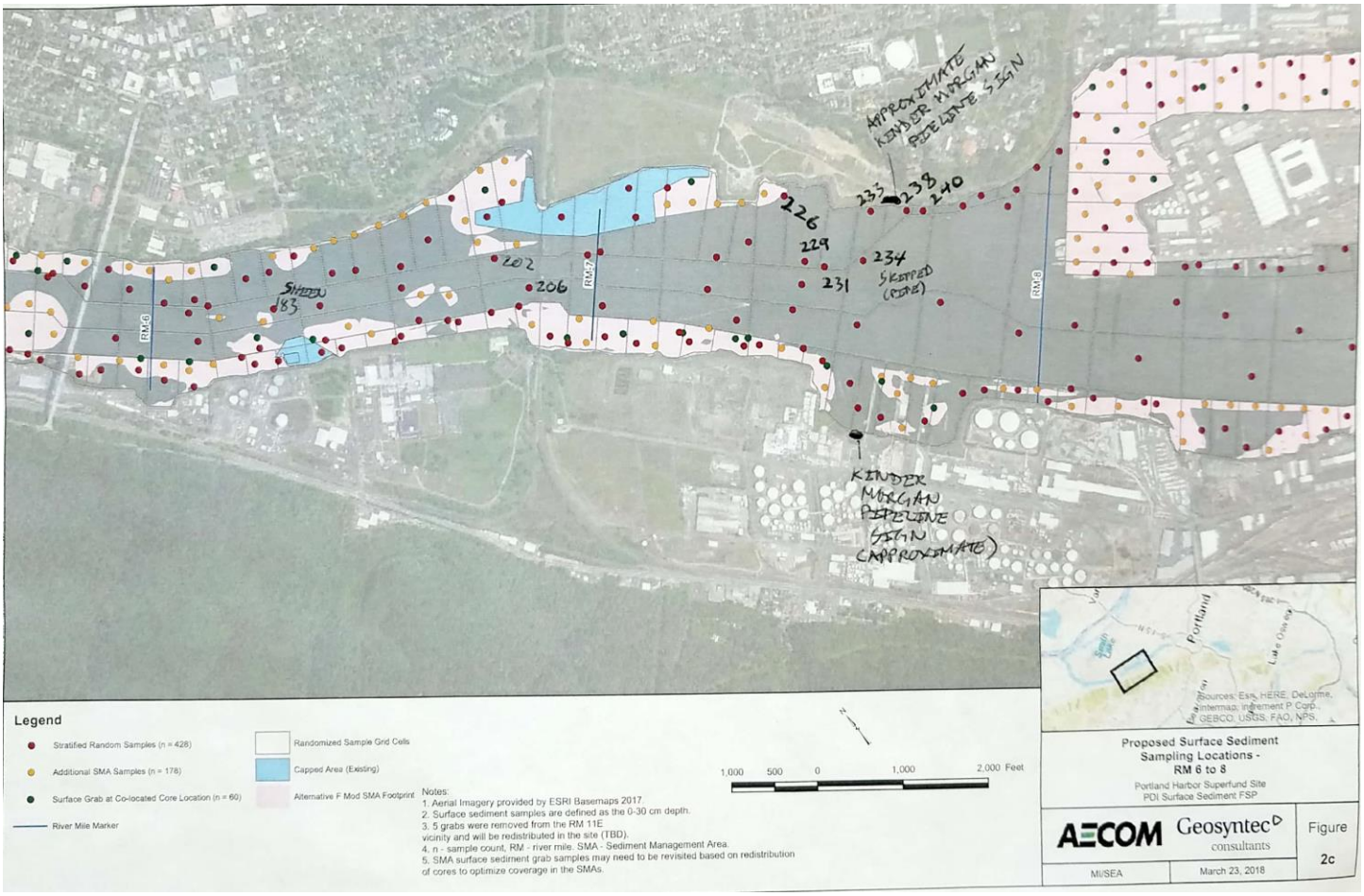

Figure 1: Field location notes